

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT**

for the

**RECYCLED WATER SUPPLY PIPELINE
AND INTERIM WATER SUPPLY
TO THE PROPOSED TESLA POWER PLANT**

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The California Energy Commission

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INTRODUCTION

This report presents a Phase I Environmental Site Assessment (ESA) that has been conducted for the proposed recycled water pipeline route for the Tesla Power Plant (TPP) project. The source of the recycled water will be the Tracy Wastewater Treatment Plant (WWTP). The recycled water would be delivered to the project through a new 11-mile long, 30-inch diameter pipeline. Recycled water will be available in 2005, upon completion of improvements to the WWTP. In the interim, the City of Tracy will be able to provide a supply of fresh water through the recycled water pipeline. The route of the proposed recycled water pipeline is shown in Figure 1-1.

This Phase I ESA is prepared in accordance with the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-00" (ASTM 2000). The objective of a Phase I ESA is to identify recognized environmental conditions, meaning the presence or likely presence of hazardous substances on a property. These conditions could be due to an existing release, a past release or threat of a release to the ground, groundwater or surface water of the property.

The standard ASTM approach is modified in this Phase I ESA to address multiple parcels along the 11-mile pipeline route. In this report the pipeline route is divided geographically into seven segments which are individually assessed (see Figure 1-1).

In order to assess and identify recognized environmental conditions in each of the seven segments of the pipeline route, current uses of properties along the route and adjacent to the route were evaluated through title search and observation. Additionally, historical documents and deeds were reviewed for representative properties of each segment of the pipeline route. State and Federal environmental records were assessed for the vicinity of the pipeline route, according to ASTM methodology. Current aerial photos are included in this report, as well as photographs taken, and observations made, during site reconnaissance.

SITE DESCRIPTION

2.1 Pipeline Route

Information contained in this section on the proposed recycled water pipeline route is from the Project Description dated April 15, 2003. The project description was prepared by CEC Project Manager Jack Caswell and is provided as Appendix A to this report (Caswell 2003).

The pipeline originates within the WWTP and proceeds west and then north along the road inside the WWTP to the intersection of Holly Drive and Arbor Avenue, the beginning of the off-site pipeline route. In this Phase I ESA, the off-site pipeline route has been divided into seven separate segments as described below and shown in Figure 1-1.

Segment 1. The pipeline crosses Holly Drive and proceeds west, through an open field within a public utility easement or dirt road to Tracy Boulevard, in line with Arbor Avenue (this is property being acquired by the City of Tracy).

Segment 2. The pipeline crosses Tracy Boulevard and proceeds west, through an open field within a public utility easement or dirt road to Corral Hollow Road, in line with Arbor Avenue (this is also property being acquired by the City of Tracy).

Segment 3. There are two alternatives to the pipeline route for the section between Corral Hollow Road and Naglee Road:

Alternative 1. The pipeline crosses Corral Hollow Road and proceeds south on Corral Hollow Road for approximately 300 feet. The pipeline then proceeds west through an open field consisting of two parcels within a public utility easement or dirt road, if possible, between Corral Hollow Road and Naglee Road, in line with Arbor Avenue and Middle Road. This segment includes crossing a small local aqueduct serving irrigation water supply.

Alternative 2. The pipeline crosses Corral Hollow Road and proceeds south on Corral Hollow Road for approximately 1,300 feet. The pipeline proceeds west along the roadside of Larch Road, to Naglee Road, then north along the roadside of Naglee Road to the intersection with Middle Road.

Segment 4. The pipeline crosses Naglee Road and then travels west along the roadside of Middle Road from Naglee Road to San Jose Road.

Segment 5. The pipeline travels south along the roadside of San Jose Road from Middle Road to its terminus at the Southern Pacific Railway tracks.

Segment 6. The pipeline crosses under the Southern Pacific Railway and across Byron Road. The pipeline then proceeds west along the roadside of Grant Line Road to Midway Road. Horizontal directionally drill under the Delta Mendota Canal and the California Aqueduct (requiring approvals from USBR and DWR).

Section 7. Immediately west of the California Aqueduct, the pipeline proceeds south along the roadside of Midway Road to the proposed Tesla Power Plant site.

It is proposed that the recycled water pipeline would be constructed within appropriate rights-of-way. Along paved roads, the pipeline would be constructed preferably along the shoulder, so as to work within the existing road easement and areas already affected by the road, and also avoid or minimize disturbance to vehicle travel. (No preference for right or left shoulder has been identified as yet). Through agricultural fields, the pipeline would be constructed within existing public utility easements or within or along the shoulder of agricultural access roads wherever possible. The pipeline would require several road crossings, for which construction of 2 to 5 days duration would be staged to allow vehicle traffic to share a minimum of a single lane as regulated by flagmen. The trench dimensions would generally be about 5 feet wide by 6 feet deep. At the Delta Mendota Canal and California Aqueduct crossings, the pipeline would be constructed using jack and bore or horizontal directional drilling techniques. This will require a pad and laydown area at each end of drilling segments. Temporary construction disturbance along the pipeline route would average about 50 feet wide, for a total of 66.7 acres. Along the

recycled water pipeline route, the surface would be restored to existing conditions. No temporary or permanent access roads would be required.

2.2 General Characteristics of the Pipeline Route and Vicinity

The topography of the area through which the pipeline is proposed is generally flat, from the WWTP west toward the California Aqueduct. Gently rolling hills occur in the vicinity of the power plant project, the Altamont Raceway at 17001 Midway and near the intersection of Grant Line Road and Mountain House Road. Figure 1-1 shows the route of the proposed pipeline superimposed on United States Geological Survey (USGS) 7.5-minute topographical maps for the vicinity.

Current uses of properties either adjacent to the pipeline route or through which the pipeline is proposed to travel include active agricultural fields with wheat and barley; fallow agricultural fields or open fields covered with mixed weeds; farms with cows, sheep, and horses; residences; light industry; and public facilities.

The first segment of the pipeline route, through a field between Holly Road and Tracy Boulevard, lies adjacent to an industrial area zoned M1 (light industrial). Approximately five percent of the pipeline route is within this agricultural area that lies adjacent to properties designated industrial zoning. About 18% of the proposed pipeline travels through agricultural fields and 82% of the pipeline route travels along roadsides which pass homes, farms and agricultural fields, through areas zoned agricultural.

Two significant water sources cross the pipeline route: the Delta Mendota Canal and the California Aqueduct. Several small agricultural drainage ditches are observed along the pipeline route, some adjacent to the pipeline route and some traversing it. The proposed pipeline route also traverses the Southern Pacific Railway right-of-way. The proposed pipeline will be constructed to cross under the Delta Mendota Canal, the California Aqueduct and the Southern Pacific railroad tracks.

2.3 Title Search of Properties Along the Pipeline Route

Title information for selected properties along the proposed pipeline route was obtained at the San Joaquin County Assessor-Recorder County Clerk's Office in Stockton, California and

the Alameda County-Clerk Recorder's Office in Oakland, California. A property title search was conducted by Risk Science Associates staff for 22 parcels of land along the proposed pipeline route. The title search covered parcels which the proposed pipeline will pass directly through as well as parcels adjacent to the pipeline route, such as farms or businesses.

The 11-mile route was divided into seven segments (see Figure 1-1). The first segment of the proposed pipeline travels across a vacant field, from the intersection of Arbor Avenue and Holly Road to Tracy Boulevard, travelling parallel (north) to an industrial area. Title information was obtained for the parcel that included the vacant field of the first segment and nine properties bordering the field (see Figure 2-1 for the location of parcels 1 to 10, and Appendix B for a list of parcel numbers and addresses).

The second segment of the pipeline route begins at Tracy Boulevard and ends at Corral Hollow Road. Two parcels were searched in this segment that are on the pipeline route, and one property south of the route, on the northern side of Larch Road. (parcel numbers 11 to 13 on Figure 2-1). The first of these parcels comprises almost the entire field between Tracy Boulevard and Corral Hollow Road. The second parcel is adjacent to the first parcel, lying south of it. The third parcel in this segment is the Larch Clover Community Center, located on the north side of Larch Road.

The third segment has two alternatives: Alternative A continues directly west through an open field in a direct line with Middle Road to Naglee Road. Title information was obtained for one parcel in this field (comprising about half of the field area; parcel number 14 on Figure 2-1). Alternative B goes south on Corral Hollow Road, follows Larch Road west and then north on Naglee Road to the intersection of Naglee and Middle Road. Title information was obtained for one parcel (a home) on the north side of Larch Road (parcel number 15 on Figure 2-1).

From the intersection of Naglee and Middle Road, the fourth segment of the proposed route continues west on Middle Road until it intersects with San Jose Road. Title information was obtained for a new, vacant building located on the southern side of Middle Road, which is owned by the Trinity Baptist Church of Tracy (parcel number 16 on Figure 2-1).

The fifth segment begins at the intersection of Middle Road and San Jose Road, and proceeds south on San Jose Road until it ends at the Southern Pacific Railway tracks. Title information was obtained for one parcel located on the west side of San Jose Road (parcel number 17).

Segment six begins at the railroad, and follows Grant Line Road until its intersection with Midway Road. Title information was obtained for three parcels in this segment, all located on the northern side of Grant Line Road (parcel numbers 18-20 on Figure 2-1). The first parcel was a home with a farm equipment storage lot, the second included property on the roadside with voltage shack, and the third included property located at the intersection of Grant Line Road with Mountain House Parkway.

From its intersection with Midway Road, seventh segment of the pipeline route would follow Midway Road south, under Interstate 580, to the Tesla site. Title information was obtained for two parcels along this segment (parcel numbers 21 and 22 on Figure 2-1). The first parcel is the property of the Mountain House Bar, located at the intersection of Grant Line Road and Mountain House Road, and the second property belonging to the Altamont Raceway is located south of Interstate 580.

2.4 Historical Information

Historical Sanborn Fire Insurance Maps of Tracy were reviewed at the Bancroft Library and the Earth Science Center at the University of California, Berkeley (UCB) campus. Microfiche maps were available for the City of Tracy for 1892, 1897, 1907, 1911, 1913, 1921, 1926, 1945, and 1947. A 1921 paper map was also reviewed for Tracy. Maps were not available for the period between 1947 and the present nor were maps available for other portions of the proposed pipeline route west of the City of Tracy.

The available information indicates that the area of the proposed pipeline route within the current city limits of Tracy, was previously either undeveloped or agricultural land. Historical information was not obtained to indicate otherwise. The information obtained for this analysis is summarized below.

Tracy 1897 (microfiche map from the “California Warehouse Book”, Earth Science Center, UCB): this map shows a warehouse on the railroad tracks and storage for wheat, barley only. Located near 6th Street.

Tracy 1921 (paper map, Bancroft Library, UCB): A fire insurance map of Tracy covering an area a few blocks north and south of 11th Street between Roosevelt and East Road, and one additional portion south of 6th Street. This area lies between approximately 1.5 to 2 miles south of the Tracy Wastewater Treatment Plant. The map shows a lumber company, freight station, power company, sugar factory, Ford garage, schools, churches, post office and theater.

Tracy 1926 (microfiche maps from the Microfilm 77648 collection, Earth Science Center, UCB): These maps cover the center of Tracy, north and south of 11th street (between approximately 1.5 to 2 miles south of the proposed pipeline route). These maps show homes, schools, garages, battery service, churches, laundry service, gas station, etc.

Tracy 1947 (microfiche maps from the Microfilm 77648 collection, Earth Science Center, UCB): Corbari Meat and Livestock Co. is shown at the corner of Grant Line Road and Corral Hollow Road. National Alfalfa Dehydrating and Milling Co. is located just south of Grant Line Road. Tracy Ice & Development Company is shown outside corporate limits

Tracy 1945 (microfiche maps from the Microfilm 31073 collections, Earth and Science Center, UCB): These maps cover the center of Tracy, north and south of 11th street (between approximately 1.5 and 2 miles south of the proposed pipeline route). The index to this map includes the following businesses (exact locations unknown): Dairymaid Creameries, Holly Sugar Corp. Factory, PG&E Substation, Peterson's Creamery, Tracy Bottling Company, and Tracy Lumber Company.

2.5 Current Aerial Photos

Current aerial photos of the entire pipeline route are included in Appendix B. These photos show land uses consistent with those observed during the site reconnaissance.

RECORDS REVIEW

3.1 Federal Environmental Records

Environmental records maintained by the United States Environmental Protection Agency (US EPA) were reviewed. The US EPA website was accessed and the following Federal database listings were searched online: National Priorities List (NPL), Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), Resource Conservation and Recovery Information System (RCRA), Toxics Release Inventory (TRI), and the Envirofacts Data Warehouse which maintains a list of EPA-regulated facilities. Criteria for being listed on each database are presented in Appendix C. Results of the Federal environmental records search and the appropriate search distances are summarized below.

- No facilities were noted on the NPL within a search distance of 1 mile of the proposed pipeline.
- No facilities were noted on the CERCLA list within a search distance of 0.5 miles of the proposed pipeline.
- Twenty-eight facilities were noted on the RCRAInfo list within 1 mile of the proposed pipeline (See Table 3-1). 22 facilities are designated small generators, 2 facilities are large generators and 4 facilities are designated transporters. Three facilities are located adjacent to the proposed pipeline route (Segment 1): Motion Industries, Inc. (small generator), Tracy Motors/Auto Recycler (small generator), and M & T Souza (transporter). Within the scope of this investigation, no evidence was discovered to indicate environmental concern to the pipeline route from these facilities. Based on the distance to the other sites identified within 1 mile of the proposed pipeline, they appear to be of minimal environmental concern to the pipeline route.

- Thirty facilities were noted on the Envirofacts Data Warehouse list within 1 mile of the proposed pipeline (See Table 3-2). Four facilities are located adjacent to the proposed pipeline route (Segment 1): City of Tracy Wastewater Treatment Plant, Motion Industries, Inc., Tracy Motors/Auto Recycler, and M & T Souza. Within the scope of this investigation, no evidence was discovered to indicate environmental concern to the pipeline route from these facilities. Based on the distance to the other sites identified within 1 mile of the proposed pipeline, they appear to be of minimal environmental concern to the pipeline route.
- One facility was noted on the TRI list within a search distance of 0.5 miles of the proposed pipeline: Holly Sugar Corp. Within the scope of this investigation, no evidence was discovered to indicate environmental concern to the pipeline route from this facility.

3.2 State Environmental Records

Environmental records maintained by the California Environmental Protection Agency (Cal-EPA) Department of Toxic Substances Control (DTSC), the Central Valley Regional Water Quality Control Board (CVRWQCB), and the California Integrated Waste Management Board (CIWMB) were reviewed. The Cal-EPA website was accessed and the following State database listings were searched online: the Hazardous Waste and Substances Site List (Cortese List) and the Site Mitigation and Brownfields Reuse Program Database ("CalSites" Database). The CVRWQCB website contained database information on Leaking Underground Storage Tanks (LUSTs) and the Site Assessment and Cleanup List. The Solid Waste Information System (SWIS) database was also reviewed. Criteria for being listed on each database are presented in Appendix A. Results of the State environmental records search and the appropriate search distances are summarized below.

- No facilities were noted on the Cortese List within a search distance of 1 mile of the proposed pipeline.
- No facilities were noted in the "CalSites" Database within a search distance of 1 mile of the proposed pipeline.

- Twelve facilities were noted on the State LUST list within 0.5 mile of the proposed pipeline (See Table 3-3). Two facilities are located adjacent to the proposed pipeline route (Segment 1): City of Tracy Wastewater Treatment Plant (WWTP) and J&B Murphy Trucking. Diesel is identified for both facilities. Additionally, three facilities are located within approximately 0.25 miles of the proposed pipeline route: McKessons Distribution Center (hydrocarbons), Coast Countries Express (unknown) and Frontier Transport (gasoline). According to the San Joaquin County Environmental Health Department (McCartney 2003), diesel- and gasoline-contaminated groundwater has been detected at the J&B Murphy Trucking site and is currently undergoing monitoring and remediation. Within the scope of this investigation, this finding indicates that a situation of environmental concern may exist. However, after additional evaluation of the extent of groundwater contamination at this location, it was determined that there exists minimal chance that contaminants have flowed north 512 feet to the pipeline route. Although the ground water flows to the north towards the pipeline route and groundwater is encountered at a depth of approximately 8 feet bgs, one monitoring well is located to the north of the extraction well and shows no contaminants present in the two most recent surveys (October 2002 and March 2003). Based upon previous studies of groundwater flow in the area, it is doubtful that contaminants had spread north of the area of investigation. Therefore, based on the distance to this and the other sites identified within 0.5 mile of the proposed pipeline, all appear to be of minimal environmental concern to the pipeline route.
- Four facilities were noted on the State Site Cleanup List, 1st quarter 2003, within 0.5 mile of the proposed pipeline (See Table 3-4). One facility is located within approximately 0.25 miles of the proposed pipeline route: Wells Fargo property at 503 Larch Road (Segment 1). A spill or leak has occurred at this site of gasoline and diesel and the site is currently undergoing a Phase II Remedial Investigation. Within the scope of this investigation, no evidence was discovered to indicate environmental concern to the pipeline route from this facility. Based on the distance to the other sites identified within 0.5 mile of the proposed pipeline, they appear to be of minimal environmental concern to the pipeline route.
- No facilities were noted on the Solid Waste Information System (SWIS) database within a search distance of 0.5 miles of the proposed pipeline.

SITE RECONNAISSANCE

Site visits were conducted on April 9 and May 5, 2003 by Risk Science Associates staff. The entire route of the pipeline was driven and visual observations were noted. In the sections where the proposed pipeline route traversed agricultural fields, the route was observed from the beginning and end of that section and the entire section was either walked (Segment 1) or driven (Segment 2 was accessible by existing dirt roads) with the exception of Segment Alternative 3a which was inaccessible by either vehicle or foot due to the presence of multiple fences (see photos E-32 and 33) . In the sections where the proposed pipeline route is located at the roadside, the entire section was driven and observed. The following observations were recorded for each of the seven segments.

Segment 1.

The proposed pipeline route originates at the northwest corner of the Tracy Wastewater Treatment Plant, and crosses Holly Drive. The first segment of the proposed pipeline travels west directly opposite Arbor Ave. (see photos E-2, E-5, and E-7) across a vacant field within a public utility easement or dirt road, parallel to and to the north of an industrial area. The public easement may or may not contain a buried natural gas pipeline as demarcation signs may have only been referring to a buried gas pipeline along Holly Drive (see photo E-6). The field consists mostly of weeds and other plants not exceeding one foot in height with isolated clumps of bushes and other plants as high as a few feet (see photos on pages E-5 to E-7, E-12 to E-17, E-20, and E-21 to E-24). It was not under active agriculture at the time of either site visit. A drainage ditch had been plowed perpendicular to the pipeline route approximately half-way between Holly and Tracy Blvd. (see photos E-16 and E-17). It connects with the concrete drainage channel running along the northern fenceline of the industrial park (see photo E-17). At the western end of Segment 1 (Tracy Blvd.) another drainage ditch had been constructed (see photo E-23).

The properties adjacent to the proposed route along this segment from Holly Road to Tracy Boulevard are zoned M1 (light industry) and include various types of industrial and commercial uses (see Table 4-1 for a list of these businesses). They are located approximately 300 feet from the proposed pipeline route. A concrete drainage ditch is present on the northern fenceline for the entire length between Holly and Tracy Blvd. (see photos E-3, E-8, E-9 to E-11, E-15, and E-17 to E-21). Since these properties were within a short distance of the pipeline route, they were investigated for possible presence of contamination and the entire concrete ditch was walked. Some signs of obvious soil contamination or distressed vegetation were observed along this concrete ditch. For most of the route, vegetation on the industrial side of the ditch was green while vegetation on the northern side was stressed or dead (see photos E-3, E-8, E-9, E-10, E-11, E-16, E-18, and E-19). In one location (photos E-19 and E-20), a black substance was found at the bottom of the ditch and along the fence. It was dried and peeling and looked like weathered petroleum residue, perhaps an old diesel or oil leak.

Segment 2.

After crossing the first vacant field, the pipeline route crosses Tracy Boulevard, and then proceeds west through a second vacant field within a public utility easement or dirt road to Corral Hollow Road. A drainage ditch and dirt road follows all but the first 150 yards of this route (see photo E-25). This route was accessed via another dirt road to the north of the pipeline route and a subsequent dirt road heading south to the route. The drainage ditch contained agricultural drainage water (photo E-26) of questionable quality yet the presence of numerous ducks, egrets, and other birds in and along the water suggests a lack of overt noxious contamination. Also, no signs of obvious soil contamination or distressed vegetation were observed in this segment of the proposed pipeline route (photos E-27 and E-28). This segment appears to also follow a buried natural gas pipeline (photo E-29) and ends at a deep drainage ditch running parallel to Corral Hollow Road (photo E-29).

Segment 3.

The proposed route crosses Corral Hollow Road and at this point there are two alternatives. Alternative A travels south for approximately 300 feet and then west through an open field to Naglee Road. This section of the proposed pipeline includes crossing a small local

aqueduct serving irrigation water supply. This segment could not be driven or walked due to the presence of a number of fences blocking access (photos E-31 and E-32). The eastern end can be seen in photos E-31 and E-32 and the western end can be seen in photo E-35.

Alternative B goes south on Corral Hollow Road for approximately 1,300 feet (photos E-31 and E-33) and then west on Larch Road (photo E-34) and goes north on Naglee Road to meet the intersection of Naglee Road and Middle Road. This alternative segment along Larch Road includes residences, two churches and a community center. Farms, fallow fields, and crop fields were observed on both sides of Larch Road. In this alternative the pipeline route crosses over the same agricultural drain as in Alternative A. An above ground storage tank was observed in the yard of the Larch Clover Community Center, 11157 West Larch Road. Approximately 300 feet south of the intersection of Middle and Naglee Roads, a large pile of junkyard debris was observed. No signs of obvious soil contamination or distressed vegetation were observed along alternative route B of Segment 3.

Segment 4.

From the intersection of Naglee Road and Middle Road (photo E-35), the proposed route continues west on Middle Road to San Jose Road. Some construction was occurring along the beginning of this segment on the south side of Middle Road (photo E-36). Sparse homes and a modern church (photo E-37) were observed along Middle Road, many with propane tanks in their yards (photo E-37). Fields were observed on both sides of Middle Road, some fallow with mixed weeds, some planted with wheat, and a few with barley. A foul-smelling farm feed lot with a large manure pile was observed near the intersection of Middle Road with Lammers Road (photo E-38). No signs of obvious soil contamination or distressed vegetation were observed in this segment of the proposed pipeline route.

Segment 5.

The pipeline proceeds south on San Jose Road (photo E-40) to its end at the Southern Pacific Railway tracks (photo E-41). Wheat and barley fields were observed on both sides of San Jose Road, as well as homes and farms, many with propane tanks in their front or back yards. The pipeline route crosses an irrigation ditch and another agricultural drainage ditch was

observed parallel to San Jose Drive, to the eastern side of the road. Two above ground storage tanks were observed at the site of Bradford's Business at 21700 San Jose Road (photo E-40). No signs of obvious soil contamination or distressed vegetation were observed in this segment of the proposed pipeline route.

Segment 6.

The proposed pipeline crosses under the Southern Pacific Railway tracks to Byron Road (photo E-42). No signs of soil contamination or distressed vegetation were observed along the railroad tracks. The route continues west along Grant Line Road passing residences, some with propane tanks in their yards, cattle, horses, and active and inactive agricultural fields on both sides of the roadway. A farm equipment rental business was noted at 15345 Grant Line Road. Warning signs for buried fiber optic cables are posted in sections along both sides of Grant Line Road.

A pumping station is proposed to be located north of Grant Line Road at the Alameda County Line, near a residential neighborhood. The pipeline route continues along Grant Line Road and crosses under the Delta Mendota Canal and the California Aqueduct, to Midway Road (photo E-43). Agricultural fields were observed on both sides of the roadway. No signs of obvious soil contamination or distressed vegetation were observed in this segment of the proposed pipeline route.

Segment 7.

The pipeline follows Midway Road south (photo E-44), under Interstate 580, to the Tesla site (photos E-46, E-47 and E-48). In this area there are farms, cattle, horses, open fields, windmills and the Altamont Raceway (photo E-45). No signs of obvious soil contamination or distressed vegetation were observed in this segment of the proposed pipeline route.

Table 4-1. Businesses Along Segment 1 of the Proposed Pipeline Route.

Company	Parcel Number	Address	Size
Solveson Crane	212-220-01	1 Sloan Court	1.61 acres
Tracy Motors, Auto Care Center	212-220-02	101 Sloan Court	43,560 sq/ft
Danforth Screw and Bolt CO CA I	212-220-03	157 Sloan Court	73,409 sq/ft
Whitehall Five (business complex)	212-210-05	4220 Commercial Drive	2.56 acres
Artisand G.H. Fixtures, Inc.	212-210-06	285 Commercial	1.71 acres
Space for lease, owned by Tatarial Garabed H ETAL	212-210-07	315 Commercial	1.58 acres
Ace in the Hole, Towing	212-210-08	355 Enterprise Pl	1.58 acres
Tracy Mini Storage	212-210-09	385 Enterprise Pl	4.96 acres
Fleming Foods	212-200-01	4350 N Tracy Bl	39,985 sq/ft

INTERVIEWS

Ms. Dotty Smith, Director of the Larch Clover Community Center was contacted to ascertain the nature of the above ground storage tank was observed in the yard of the Community Center (Smith 2003). Ms. Smith stated that to her knowledge, the county has owned the property for at least 15 years although she did not have knowledge of the prior uses of the property. To her knowledge, nothing is stored in the above ground storage tank any more. It was a water storage tank that was probably hooked up to a well, but now they have other sources of water and no longer use the tank.

Mr. Leroy Ornellas (Ornellas 2003) of the San Joaquin County Board of Supervisors was also contacted regarding past property uses at the Community Center. He stated that the entire Larch Clover area was used historically for agricultural purposes and that prior to the Community Center being built, the property was vacant (agricultural).

Ms. Vicky McCartney (McCartney 2003a,b) of the San Joaquin County Environmental Health Department (EHD) was contacted to determine the status of the leaking underground storage tank at J&B Murphy Trucking, 355 Enterprise. Ms. McCartney stated that diesel and gasoline have been detected in groundwater at this site and the EHD conducts quarterly groundwater monitoring of five monitoring wells and an extraction well. Results of the most recently reported sampling event indicate that diesel and gasoline are non-detect in the five monitoring wells and at the extraction well location they were detected in the following concentrations in groundwater: 800 µg/l diesel and 150 µg/l gasoline. Quarterly monitoring will continue to be conducted and reported at this site. In a follow-up conversation, Ms. McCartney provided faxed information showing the location of the monitoring wells, the depth to groundwater in the area, and the direction of flow. Although the ground water flows to the north towards the pipeline route and groundwater is encountered at a depth of approximately 8 feet bgs, one monitoring well is located to the north of the extraction well and shows no contaminants present in the two most recent surveys (October 2002 and March 2003). Based upon previous

studies of groundwater flow in the area, it is doubtful that contaminants had spread north of the area of investigation.

Mr. Steven Bradford of 21700 San Jose Road (parcel #17) was contacted about the above-ground storage tanks seen on his property (photo E-40). Mr. Bradford stated that he used these tanks to store gasoline and diesel fuel in 1981-82, converted them to store water used for mixing pesticides and herbicides in 1983 and has not used them since 1985. They have been empty since that time.

FINDINGS & OPINION

More than 80% of the pipeline route traverses rural county road right-of-way. Less than 20% of the pipeline route traverses agricultural lands and about 5% of this distance occurs adjacent to lands zoned light industrial. The proposed pipeline will cross under the Delta Mendota Canal, the California Aqueduct and the Southern Pacific railroad tracks.

The available historical information reviewed indicates that the area of the proposed pipeline route within the current city limits of Tracy, was previously either undeveloped or agricultural land. Historical Sanborn Fire Insurance Maps were not available for the proposed pipeline route west of Tracy. However, at least seven parcels west of Tracy were selected for a title search and thus some historical information on land use was obtained for a representative number of parcels along this portion of the pipeline route. Review of federal and state environmental records revealed the presence of a leaking underground storage tank and diesel/gasoline contamination of groundwater at an industrial property adjacent to the open field located in Segment 1.

It is recommended that a modified Phase II Environmental Site Assessment be prepared for a few segments of the proposed pipeline route. At least one representative parcel of agricultural land in segments 1, 2 and 3 of the route should be evaluated for the presence of pesticides in soil. It is well established that pesticides are applied to agricultural fields and along fencelines. Since more than 80% of the pipeline route travels adjacent to agricultural fields and the remaining 20% travels through agricultural fields, it is reasonable to conclude that pesticide concentrations will exist in those settings of pipeline through and along agricultural lands. This recommendation is consistent with recommendations made by CEC Staff for other power plant sites and linear routes (e.g. Cosumnes Power Plant Project 2002). Further investigation into the extent and magnitude of the diesel and gasoline contamination at J&B Murphy Trucking at 355 Enterprise is not recommended.

CONCLUSIONS

Risk Science Associates has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 for the proposed recycled water pipeline route for the Tesla Power Plant (TPP) project in Tracy, California. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the proposed pipeline route except for the following:

- Probable pesticide residues in fields and roadsides.

REFERENCES

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QUALIFICATIONS & SIGNATURE

This Phase I Environmental Site Assessment was prepared by Alvin J. Greenberg, Ph.D. and Effie Fourakis, MPH of Risk Science Associates.

Dr. Greenberg has had over two decades of experience in environmental site assessments, RI/FS preparation, hazardous waste site characterization, preparation of human and ecological risk assessments, and interaction with regulatory agencies concerning contaminated sites. Dr. Greenberg has served on many local, state, and federal advisory committees, including the State Water Resources Control Board Noncompliant Underground Tanks Advisory Group, the State Water Resources Control Board Bay Protection and Toxic Cleanup Program Advisory Committee, the Cal/EPA Department of Toxic Substances Control Program Review Committee, the DTSC Integrated Site Mitigation Committee, Cal/EPA REA I and REA II Advisory Committee, the San Francisco Hazardous Materials Advisory Committee, and the Contra Costa County Hazardous Waste Task Force. He is Board Certified as a Qualified Environmental Professional (QEP) and is a California Registered Environmental Assessor (REA).

Ms. Fourakis is the senior project manager responsible for preparation of Phase I environmental site assessment reports and preparation of comprehensive human health risk assessments for air toxics emissions and contaminated sites. She is a California Registered Environmental Assessor (REA) with over 17 years experience in the field.

Alvin J. Greenberg, Ph.D.

Effie Fourakis, MPH

APPENDIX A

PROJECT DESCRIPTION

RESULTS OF TITLE SEARCH

B.1 Industrial Facilities & Properties Between Holly Drive and Tracy Boulevard, Segment 1 of the Proposed Pipeline

Nine parcels located in Segment 1 of the proposed pipeline route were selected for title review. Eight of the nine parcels are located within an area zoned M1 or light industrial. Names, addresses, parcel numbers, size, current and past owners, and zoning information are summarized below. The locations of the sites at which title searches were conducted are shown in Figure 2-1.

Parcel # 1

Field between Holly Road and Tracy Blvd.

Current owner: Holly Sugar, Corp C/O I H Acquisition

Size: 197.55 acres.

One deed recorded: LEOPS-01, on 2-2-1988.

(LEOPS = Legal Entity Ownership Program Statement)

Parcel # 2

Solveson Crane

1 Sloan Court

Parcel # 212-220-01

Current owner: Solveson, Harvey and Virginia TR

Size: 1.61 acres

Zoning: M1

Current deed: 96116996 Date: 11-22-1996

Prior deeds: 96109585 10-29-1996

84034257 5-16-1984

Parcel # 3

Danforth Screw and Bolt Co.

157 Sloan Court

Parcel # 212-220-03

Current owner: Danforth Screw and Bolt Co.

Size: 73,409 sq/ft

Zoning: M1 (light industrial)

Current deed:	00041343	Date:	4-17-2000
Prior deeds:	91011335		2-7-1991
	89117883		12-19-1989
	85029831		5-3-1985
	84047419		7-10-1984

Parcel # 4

Tracy Motors, Auto Care Center

101 Sloan Court

Parcel # 212-220-02

Current owner: Willford, Curtis O (Curtis and Jane Lynn Willford – husband and wife)

Previous owner: Don and Darlene Cose (husband and wife)

Size: 43,560 sq/ft

Zoning: M1

Current deed:	84034257	Date:	5-16-1984
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Parcel # 5

Whitehall Five

4220 Commercial Drive

Parcel # 212-210-05

Current owner: Strough, Donald TR et al.

Size: 2.56 acres

Zoning: M1

Current deed:	88022302	Date:	3-11-1988
Prior deed:	80025908		4-21-1986

Parcel # 6

Artisand G.H. Fixtures, Inc.

285 Enterprise Place

Parcel # 212-210-06

Current owner: Tatarian, Garabed et al.

Size: 1.71 acres

Zoning: M1

Current deed:	03006063	Date:	1-10-2003
Prior deeds:	90079106		8-10-1990
	84033389		5-14-1984
	83071672		9-30-1983
	83071671		9-30-1983
	8008006		11-25-1980

Parcel # 7

Space for lease

315 Enterprise Place

Parcel # 212-210-07

Current owner: Tatarian, Garabed H., et al

Size: 1.58 acres

Zoning: M1

Current deed:	01157610	Date:	9-27-2001
Prior deeds:	90079105		8-10-1990
	83089124		12-15-1983
	80025908		4-21-1980

Parcel # 8

Ace in the Hole, Towing

355 Enterprise Place

Parcel # 212-210-08

Current owner: Enterprise Investments PTP

Size: 1.58 acres

Zoning: M1

Current deed:	84039694	Date:	6-8-1984
Prior deed:	80025908		4-21-1980

Parcel # 9

Tracy Mini Storage

385 Enterprise Place

Parcel # 212-210-09

Current owner: Arnese, Joan M TR

Size: 4.96 acres

Zoning: M1

Current deed:	99002735	Date:	1-8-1999
Prior deeds:	98043152		10-30-1997
	85000185		1-3-1985
	81010230		2-20-1981

Parcel # 10

Fleming Foods

4350 North Tracy Blvd

Parcel # 212-200-01

Current owner: Holly Sugar, Corp C/O I H Acquisition

Size: 39,985 sq/ft

One deed recorded: LEOPS-01, on 2-2-1988

(LEOPS = Legal Entity Ownership Program Statement)

B.2 Residences, Farms and Other Properties Along Segments 2 through 7 of the Proposed Pipeline Route

Representative properties through which the pipeline will travel or which are adjacent to the pipeline route, from Tracy Boulevard to the proposed power plant site, were identified during site reconnaissance for this investigation. All are located within areas zoned agricultural, with the exception of the Larch Clover Community Center which is zoned PF, public facility. Names, addresses, parcel numbers, size, current and past owners, and zoning information are summarized below. Most properties evaluated appear to be owned by families, individuals, or small industries. The locations of the sites at which title searches were conducted are shown in Figure 2-1.

Segment 2

Parcel # 11

Tracy Garden Farms

Parcel # 212-150-01

Block 13, 14, and 15 (the entire field between Tracy Blvd. and Corral Hollow Road)

Current owner: Holly Sugar, Corp C/O I H Acquisition

Size: 573.39 acres.

One deed recorded: LEOPS-01, on 2-2-1988

(LEOPS = Legal Entity Ownership Program Statement)

Parcel # 12

21162 South Corral Hollow Road

Parcel # 212-180-01

This parcel lies south of parcel 212-150-01, approximately where the pipeline will pass.

Size: 1.51 acres.

Current owner: Nisar Ali

Deeds:

- 01205993 Nancy J. Bergeron grants this property to Nisar Ali in December 2001.
- 98129709 Federal Home Loan Mortgage Corp. grants to Nancy J. Bergeron in Oct. 1998.
- 98091579 Global Enterprise Trust grants to Federal Home Loan Mortgage Corp., Aug. 1998.
- 98014814 Diversified Unlimited Inc. grants to Global Enterprise Trust in May 1998.
- 98010088 Makhan Sandhu grants to Diversified Unlimited in January 1998.

- 91021049 Michael John Rokos and Deborah A. Rokos grant to Makhan Sandhu and Heidi Davis in February 1991.
- 88111948 Michael John Rokos adds his wife Deborah A. Rokos to the deed in Dec. 1988.
- 4367-782 Zella M. Walters grants to Michael John Rokos in February 1978.

Parcel # 13

Larch Clover Community Center, Community Action Agency

11157 West Larch Road

Parcel # 212-170-01

Zoning: PF (public facility)

No records found

Segment 3

Parcel # 14

12227 West Larch Road

Parcel # 212-060-12

This parcel covers about half of the area the pipeline will cross between Corral Hollow and Naglee.

Current owner: Mary S. Pacheco.

Size: 33.93 acres.

One deed recorded: 80041921 Mary S. Pacheco, declaring the death of her husband, the joint tenant, Manuel Souza Pacheco Jr. in June 1980.

Parcel # 15

12200 Larch Road

Parcel # 212-050-07

Current owner: Gwerder, Jeanette L. et al.

Size: 5.01 acres

Zoning: AL (limited agriculture minimum 10 acres)

Current deed: 94022957 Date: 2-17-1994

Prior deeds: 91090045 9-16-1991

81002837 1-16-1981

3874666 7-1-1900

Segment 4

Parcel # 16

Trinity Baptist Church of Tracy

13400 Middle Road

Parcel # 212-040-02

Current owner: Trinity Baptist Church of Tracy, Southwinds Church

Size: 16.51 acres

Zoning: AG 40 (agriculture minimum 40 acres)

Current deed: 00074317 Date: 6-30-2000

Prior deed: 89037703 5-1-0989

Segment 5

Parcel # 17

21700 San Jose Rd.

Parcel # 209-280-20.

Current owner: Steven W. Bradford.

Size: 1.12 acres.

Deeds:

- 93085504 Margaret A Bradford (wife), grants Steven W. Bradford (husband) sole ownership of property in January 1993.
- 3837-182 Josephine Forley, Laura Smith, Marie Cunha, and George Joseph Smith grant to Steven and Margaret Bradford in January 1974.

Segment 6

Parcel # 18

15345 Grant Line Road

Parcel # 209-190-32

Current owner: Ormonde, Mary et al., Eugene Pereira

Farm equipment rentals

Size: 0.50 acres

Zoning: AG 40

Current deed: 02097933 Date: 6-7-2002

Prior deeds:	02005903	1-11-2002
	01187228	11-14-2001
	01135518	8-21-2001
	99131951	10-20-1999
	97002058	8-21-1997
	94036213	3-21-1994
	92127398	10-30-1992
	92127401	10-30-1992
	92053631	5-8-1992
	89084743	9-15-0989
	80067945	10-8-0980
	80058255	9-3-1980

Parcel # 19

Home near voltage shack

17529 Grant Line Road

Parcel # 209-140-02

Current owner: Machado, Judith TR et al., Jayne A Branscum TR

Size: 157.94 acres

Zoning: AG 40

Current deed: 01084982 Date: 6-1-2001

Prior deeds: 9612590 12-23-1996

4391-602 4-28-1978

Parcel # 20

21949 Mountain House Parkway

Parcel # 209-450-15

Current owner: Souza, Jose A TR and B Est, et al.

Location of the proposed Mountain House Community

Zoning: AU 20 (agriculture urban reserve)

Current deed: 02114935 Date: 7-5-2002

No prior deeds found.

Segment 7

Parcel # 21

Mountain House Bar

16784 Grant Line Rd., Livermore, Alameda County

Parcel # 99B-7600-06

Owner: Lema Ronald J and Robinson Evelyn M.

Deeds:

- 01549254 dated 11-27-2001 – Ronald J. Lema grants joint ownership to his wife Evelyn M. Robinson.
- 87081458 dated 3-25-1987 – Dennis Bier and Rebecca Bier grant this property to Ronald J. Lema.

Parcel # 22

Altamonte Raceway

17001 Midway Road, Alameda County

Parcel # 99B-7675-05-07

Current owner: Altamont Raceway Park Inc. (C/O H Leroy Minatre)

Deeds:

- 95258219 dated 11-2-1995 – Ultimate Peak Inc grants Altamont Raceway Park Inc.
- 94348245 dated 11-1-1994 – Bernard W. Kabage grants Ultimate Peak Inc.

- 94093342 dated 3-10-1994 – Dorothy H Podsakoff and Lary Lacey grant to Kabage Bernard.

APPENDIX C

CURRENT AERIAL PHOTOS

ENVIRONMENTAL DATABASE LIST CRITERIA

National Priority List (NPL)

<http://www.epa.gov/superfund/sites/npl/index.htm>

The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation.

CERCLIS Hazardous Waste Sites

<http://www.epa.gov/superfund/sites/cursites/>

CERCLIS is the Comprehensive Environmental Response, Compensation, and Liability Information System. CERCLIS contains information on hazardous waste sites, potential hazardous waste sites, and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL.

Resource Conservation and Recovery Act (RCRAInfo)

http://www.epa.gov/enviro/html/rcris/rcris_query_java.html

RCRA requires that generators, transporters, treaters, storers and disposers of hazardous waste provide information concerning their activities to state environmental agencies. These agencies then provide the information to regional and national US EPA offices.

Toxics Release Inventory (TRI)

http://www.epa.gov/enviro/html/tris/tris_query.html

TRI contains information about more than 650 toxic chemicals that are being used, manufactured, treated, transported, or released into the environment. Manufacturers of these chemicals are required to report the locations and quantities of chemicals stored on-

site to state and local governments. The reports are submitted to the EPA and state governments.

EPA Envirofacts Data Warehouse

http://www.epa.gov/enviro/html/multisystem_query_java.html

The Envirofacts Data Warehouse is a single point of access to select U.S. EPA environmental data. Envirofacts provides access to several EPA databases to provide information about environmental activities that may affect air, water, and land anywhere in the United States. The multi-system query of this database provides a list of EPA-regulated facilities in a certain geographic area.

Hazardous Waste and Substances Site List (Cortese List)

http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm

The Cortese List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Site Mitigation and Brownfields Reuse Program Database ("CalSites" Database)

<http://www.dtsc.ca.gov/database/Calsites/>

DTSC's Site Mitigation and Brownfields Reuse Program Database (also known as "CalSites") provides DTSC's component of Cortese List data by identifying Annual Workplan and Backlog sites listed under Health and Safety Code section 25356. CalSites contains information on properties in California where hazardous substances have been released, or where the potential for a release exists.

Leaking Underground Storage Tanks - Quarterly Report, January 2003

http://www.swrcb.ca.gov/~rwqcb5/available_documents/#anchor617894

State Water Resources Control Board. This database contains a quarterly updated list of Leaking Underground Storage Tank (LUST) cases in the Central Valley Region, current as of April 2003. Cases are identified by responsible party, address, lead agency, Regional Board staff person, and case number. Information on each case includes contaminant type(s), case type (soil, groundwater, surface water), and status.

Site Assessment and Cleanup List, 1st Quarter of 2003

http://www.swrcb.ca.gov/~rwqcb5/available_documents/#anchor617473

State Water Resources Control Board. List of Spill and Leak Sites (SL), Above Ground Storage Tanks (AGT), and Department of Defense (DOD) and Department of Energy (DOE) cleanup cases in the central portion of the Central Valley Region, 1st Quarter of 2003. This is a list of sites that have degraded or threaten to degrade groundwater quality, including spill sites, AGT sites, and DOD/DOE sites. Included are addresses for each site, site status, and contaminants of concern. This list is updated quarterly.

Solid Waste Information System (SWIS)

<http://www.ciwmb.ca.gov/SWIS/>

California Integrated Waste Management Board. The Solid Waste Information System (SWIS) database contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.